

EK-Velocity WS series CPU water block installation manual

This product is intended for installation only by expert users. Please consult with a qualified technician for installation. Improper installation may result in damage to your equipment. EK Water Blocks assumes no liability whatsoever, expressed or implied, for the use of these products, nor their installation. The following instructions are subject to change without notice. Please visit our web site at www.ekwb.com for updates. Before installation of this product please read important notice, disclosure and warranty conditions printed on the back of the box.

Before you start using this product please follow these basic guidelines:

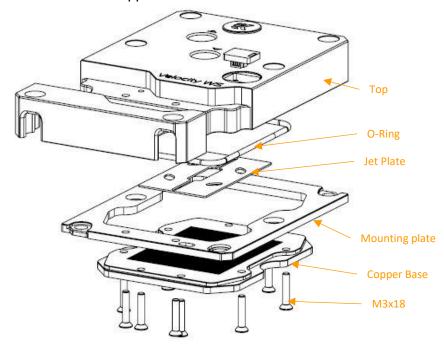
- Please carefully read the manual before through before beginning with the installation process!
- Please remove your motherboard from the computer to assure safest mounting process in order to prevent any possible damages to your CPU and/or motherboard's circuit board (PCB).

The EK-HFB, EK-HDC and EK-ACF type fittings require only a small amount of force to screw them firmly in place as the liquid seal is ensured by the rubber o-ring gaskets.

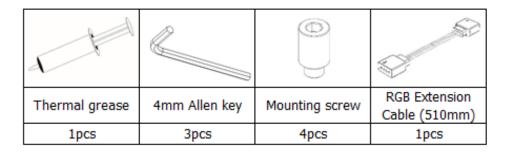
The use of corrosion inhibiting coolants is always recommended for any liquid cooling system.

STEP 1: GENERAL INFORMATION ON PRODUCT COMPATIBILITY

Congratulations on your purchase of EK-Velocity WS water block. This water block is pre-assembled for use with modern Intel® Processors with LGA 3647 socket for server and workstation type motherboards. This water block supports the LGA 3647 socket.



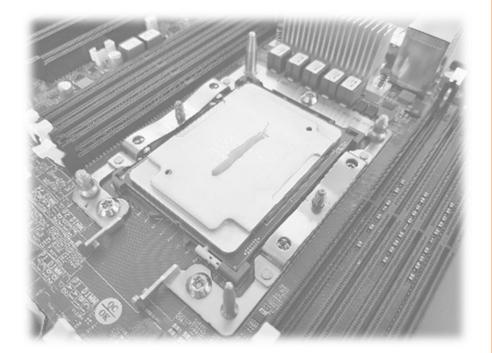
STEP 2: TABLE OF CONTENT



STEP 3: PREPARING CPU AND APPLYING THERMAL GREASE (TIM)

Cleaning the CPU: Wipe the CPU's contact surface (by using nonabrasive cloth or *O-tip*).

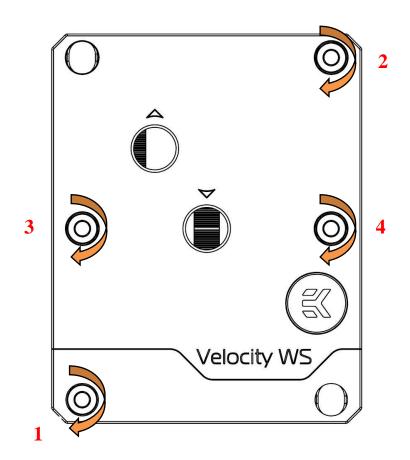
Applying thermal compound: EK recommends a blob or line method of applying the enclosed EK-TIM Ectotherm™ thermal compound to the CPU heatspreader (IHS) - see sample photo on right. The quantity of about pea size is just about right. There is no need to cover the whole IHS. Applying too much thermal grease will have negative impact on the cooling performance!



STEP 4: INSTALLING THE WATER BLOCK

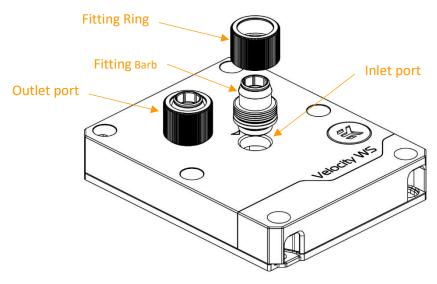
- 1) On majority of motherboards the EK-Velocity WS can be sucessfully installed with motherboard already being pre-fitted to the computer chassis. Still, it is best practice to place a motherboard on an even surface with front side facing up.
- 2) Install CPU and apply TIM (thermal grease) as shown in STEP 3
- 3) Align water block above the LGA 3647 socket on motherboard with pre-installed CPU.
- 4) You have to tighten the screws in cross pattern sequence using 4mm Allen Key. Screws 1 and 2 must be tightened until they hit the limiter and are not able to turn more.

Do not overtighten the screws 3 and 4!



STEP 5: CONNECTING THE WATER BLOCK TO THE COOLING LOOP

Tighten the fitting barbs in clockwise direction until the gasket underneath is compressed.

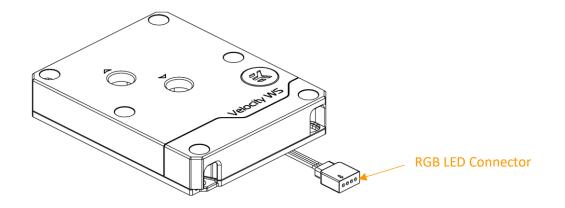


With EK-Velocity series water blocks it is mandatory to use the port that is nearest to the center of the water block as INLET port. Mixing the ports may result in less than ideal thermal performance of the water block.

EK recommends the use of EK-ACF fittings. When using fittings other than EK-ACF series please use hose clamps or appropriate substitute to secure the tubing to the barb. The use of biocide containing and corrosion inhibiting coolant is always recommended for any liquid cooling system.

STEP 6a: CONNECTING RGB LED STRIP

Plug the 4-pin connector from Water block's and Fan's RGB LED light to the RGB HEADER on the motherboard. The LED will work if the pin layout on the header is as follows: **+12V G R B.**





In case that connector from Water block is to short please use EK-RGB Extension Cable that comes with water block.

Please ensure that the arrow indicated on the connector is plugged into the +12V line as indicated on your motherboard.

Failure to do so, will damage your motherboard or LED strip.